

Table of Contents

Designing a Naturalistic and Interactive VR Museum Environment With a Realistic Avatar as a Guide for Cognitive Treatment of the Elderly <i>Amir Bani Saeed and Zahra Moussavi</i>	1
Non-Immersive Virtual Reality as a Safer Alternative for Cognitive Training in Older Adults: Investigating the Effect of Age on Cybersickness <i>Rashmita Chatterjee and Zahra Moussavi</i>	3
Acceptability of an AI-Powered Wearable Ring Sensor for Upper Body Mobility in Individuals with Cognitive Impairment: A Pilot Study <i>Holly Shannon, Asma Seraj Pour Shooshtarib, Logan Young, Makara Rolle, Jennifer O'Neil, Jose Carlos Tatmatsu-Rocha, Dahlia Kairy, Olga Theou, Zahra Moussavi, Ke Peng, and Mirella Veras</i>	5
Extended Reality (XR) vs. Virtual Reality (VR) for Artificial Intelligence (AI)-Driven Balance Improvement in Older Adults <i>Mirella Veras, Asma Seraj Pour Shooshtarib, Zahra Moussavi, and Ke Peng</i>	8
Employing Optical Brain Imaging for Real-Time Assessment of Brain Functions During Immersive Virtual Reality: Harnessing Potential for Neurorehabilitation <i>Asma Seraj Pour Shooshtari, Mirella Veras, Ali Kassab, Daniel Alejandro Galindo Lazo, Frederic Lesage, Dang Khoa Nguyen, Zahra Moussavi, and Ke Peng</i>	11
Towards Personalized Mobility Assessment and Rehabilitation: A User Centered Designed VR/XR-Based Solution for Older Adults <i>Yann Morere, Jerome Dinet, Fabien Clanche, Thierry Bastogne, Matthieu Casteran, Lucas Detto, Matthieu Burtin, Frederic Bousefsaf, and Kaoutar El Ghabi</i>	15
Enhancing the Utilization of Artificial Intelligence and Social Robots in Specialized Units for Children with Autism <i>Marie Rychalski, Armand Manukyan, and Jerome Dinet</i>	25
Ergonomic Challenges and Benefits of Enhanced Cultural Application with Augmented Reality for People with Autistic Spectrum Disorder <i>Armand Manukyan, Antoine Pollet, Stephanie Claudel, Jerome Dinet, and Laurent Dupont</i>	31
The Effects of Virtualization on Connectedness, Presence, and Immersion: A Mixed-Methods Comparison of Real, Mixed, and Virtual Environments <i>Niklas Groffner</i>	38
Intergenerational Codesign of Immersive Technology for a Heritage Site and Underwater VR Experience <i>Marius Nicolae Varga, Oksana Hagen, Rory Baxter, Alejandro Veliz Reyes, Ray B. Jones, Amir Aly, Dena Bazazian, and Swen Gaudl</i>	48

Addressing the Symbol Grounding Problem in VR <i>Muneo Kitajima, Makoto Toyota, and Katsuko T. Nakahira</i>	56
Beyond the Walls: Comparison of Three Extended Reality Technologies Giving Care Home Residents Access to Tourism and Cultural Content for Health and Wellbeing <i>Hannah Bradwell, Katherine Edwards, Leonie Cooper, Rory Baxter, Arunangsu Chatterjee, Ray Jones, and Catherine Hennessy</i>	63
Enhancing School Visits to Museums through Gamified VR: A Complementary Approach to Learning and Social Engagement <i>Cleiton Ferreira, Paula Latorre, and Francisco Antonio Nieto-Escamez</i>	70